

Utilization of Belt Air
in
Room & Pillar Mining

Comments presented to the Technical Study Panel

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Members of the Technical Study Panel:

On behalf of Alpha Natural Resources I want to thank you for the opportunity to present comments regarding the utilization of belt air in room and pillar mining.

Alpha Natural Resources is a relatively new company compared to most in the eastern United States, but is run by people who have been mining coal for decades. And while a young company, we're not unlike nearly every other operator in Central Appalachia in that most are mining reserves either immediately adjacent to, above, below, in-between and in some cases "through" old mine works. This can create a tremendous drain on resources; not just economically, but from the practical aspect of engineering coal mines to successfully mitigate the associated issues. The ability to use belt air to

ventilate active faces provides one area of flexibility that enhances mining in a mature coal basin.

For a quick overview, Alpha Natural Resources has subsidiaries in Kentucky, Pennsylvania, Virginia and West Virginia. We mine, prepare and sale approximately 25 million tons annually by operating 38 deep mines, 27 surface mines and 10 preparation plants.

All deep mining is done via room and pillar methods with single and supersection continuous miner fleets using continuous haulage or shuttle cars. Mining height ranges from 36 to 96 inches. Face ventilation is provided by sweeping air or fish-tail type schemes by splitting the intake air to either side of the faces. Some of our mines use positive fan pressure (blowing) setups and others negative (exhausting). Access into these mines is

varied, a few are below-drainage via box-cuts or slope and shafts but most have "drift" or crop accessed.

Ten of these mines either use or have applied to use belt air to supplement the primary intake to the active faces. Three use continuous haulage which, by its very nature, makes it almost impossible to "not use" belt air in the face. Some of these mines have more than one unit of equipment working in different locations while one has four "full-out supersections" (Kingwood). All but two of these mines are in methane producing seams. In order to provide the required air volumes to safely ventilate these faces, we have to use belt air. The inability to do so would render these boundaries absolutely uneconomical to recover.

Again from a practical viewpoint, if unable to use belt air in the face, we would have to drive more

entries to overcome the resistance, which in-turn makes the roof harder to control due to going beyond the critical span of the overlying strata. Maintaining all these entries outby is not without expense either since today's mines advance to such depths.

Combine this with sporadic seam pitching, undulations or rolls and we most certainly wouldn't be able to win the tonnage that is currently produced. If the extra entries have to be driven to offset the loss of volumes now being provided via belt air - I am certain that a high percentage of the room and pillar mines now in operation would not be able to continue.

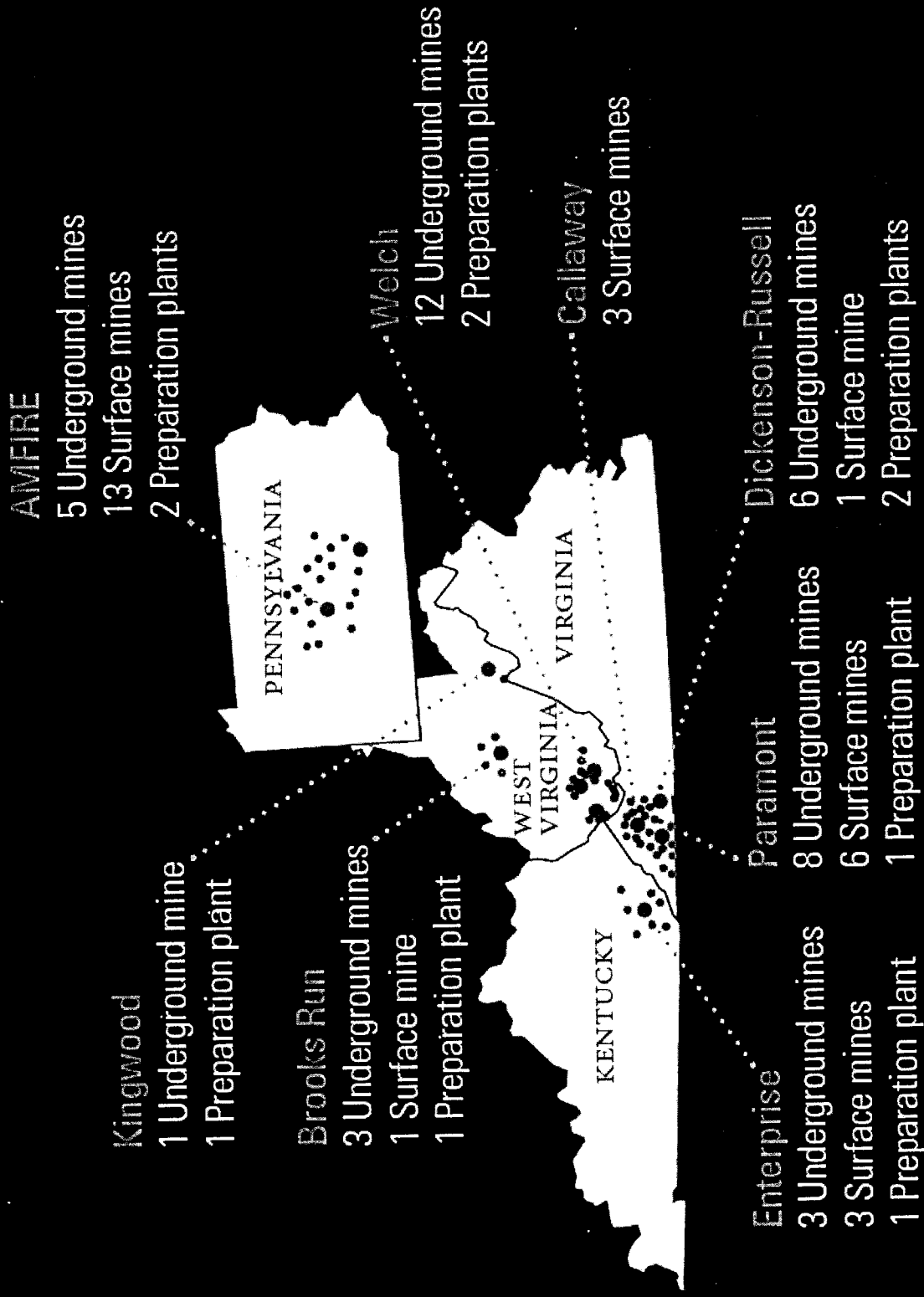
Alpha Natural Resources

Utilization of Belt Air at Room & Pillar Coal Mines



Business Unit Locations

Operations as of February 1, 2007



Deep Mine Characteristics

- ◆ Room & Pillar Type Mining.
- ◆ Single & Supersection CM fleets utilizing continuous haulage and shuttle cars.
- ◆ Mining height ranges from 36 – 96 inches.
- ◆ Sweep and Fish-tail ventilation schemes.
- ◆ Typically crop-accessed reserve boundaries although some below drainage operations.



Alpha Mines that use Belt Air for Face Ventilation

Amfire Mining

- Gilhouser Run Mine
 - ◆ 1 unit w/ continuous haulage
- Madison Mine
 - ◆ 2 units w/ 1 continuous haulage, 1 shuttle cars
- Nolo Mine
 - ◆ 3 units w/ shuttle cars
 - ◆ Methane
- Dora (applied)
 - ◆ 1 unit w/ continuous haulage
 - ◆ Methane



Kingwood Mining Whitetail Mine

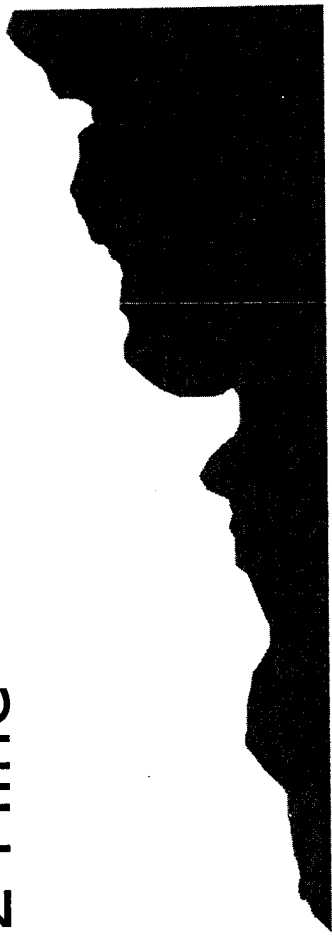
- ◆ 4 units w/ shuttle cars
- ◆ Methane
- ◆ Difficult roof

Paramont Coal Company

- Deep Mine 26
 - ◆ 4 units w/ shuttle cars
 - ◆ Methane
- Deep Mine 35
 - ◆ 2 units w/ shuttle cars
 - ◆ Methane

Black Dog Coal Corp. #2 Mine

- ◆ 1 unit w/ shuttle cars
- ◆ Methane



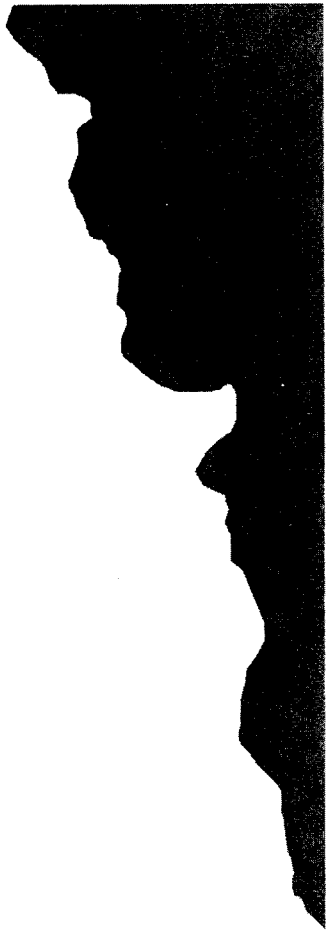
New or Proposed Mines

Brooks Run Cucumber Mine

- 2 units: supersections w/ shuttle cars
- Methane

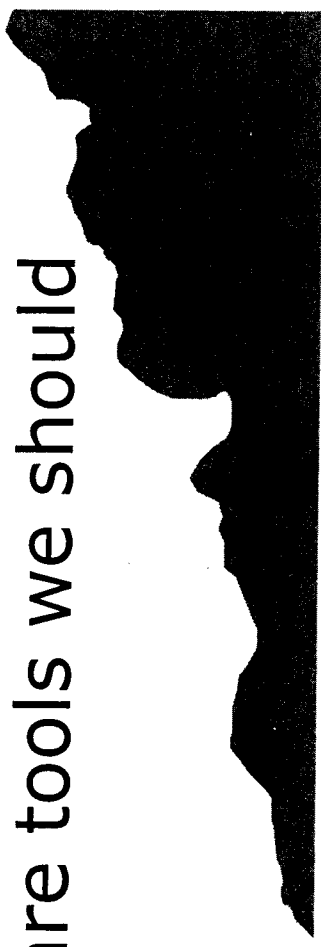
Enterprise Mining Company # 9

- 2 units: supersections w/ shuttle cars
- Methane



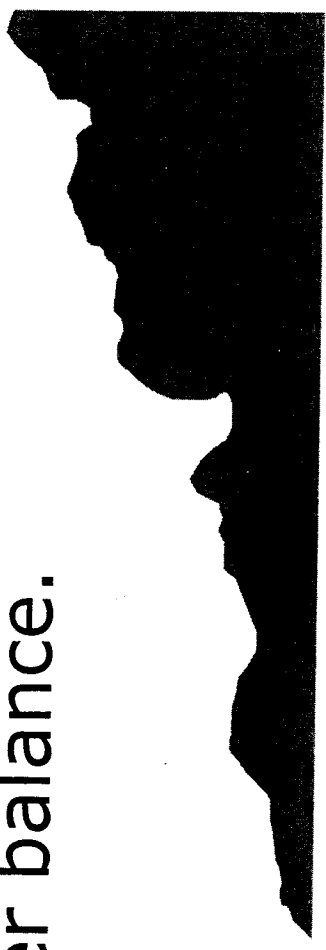
Why we need Belt Air!

- Inconsistent seam conditions / rolls – hard to maintain required number of entries.
- Roof conditions / maintaining entries outby problematic.
- Methane control / more volume and pressure for face use.
- Monitoring systems are tools we should use!



Why we need Belt Air!

- Volume used to ventilate belt entries takes away from pressure that is better used behind the face curtain.
- Difficult to keep belt air *out* of the face.
- Roof issues associated with more entries / arching due to width.
- Less total volume required / less pressure / less leakage / better balance.



In Closing

- ◆ Use of Belt air in conjunction with monitoring systems is safe and prudent because it allows more volume and higher pressure at the point where it's needed the most:
at the mine face!



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